

SHOULD YOUTUBE'S CONTENT ID BE LIABLE FOR MISREPRESENTATION UNDER THE DIGITAL MILLENNIUM COPYRIGHT ACT?

Abstract: YouTube has quickly become the dominant player in the Internet video sharing platform market. To keep its leading position, it created an internal automated system to police potential copyright infringements known as Content ID. Generally, that system functions similarly to third-party computer automated systems that send takedown requests, yet it is exempt from liability for removing lawful videos under a safe harbor provided by the Digital Millennium Copyright Act of 1998 (“DMCA”). Although some industry experts first championed Content ID, many now question whether it unfairly favors copyright holders and YouTube itself at the expense of content creators and the greater Internet community. This Note asserts that a Content ID match is equivalent to a formal takedown notice under the DMCA, and that Content ID should thus have to consider fair use prior to issuing a Content ID match. This Note then argues that the DMCA’s safe harbor provisions should be amended to require websites utilizing internal automated systems to consider fair use.

INTRODUCTION

YouTube has rapidly changed the way people express themselves and interact with each other on the Internet.¹ Over 400 hours of video are uploaded to YouTube every minute from people all around the world, documenting momentous events and daily life.² Those videos help distribute news, showcase new artistic content, and provide countless hours of entertainment.³ Yet, hun-

¹ See Benjamin Boroughf, *The Next Great YouTube: Improving Content ID to Foster Creativity, Cooperation, and Fair Compensation*, 25 ALB. L.J. SCI. & TECH. 95, 101 (2015) (discussing YouTube’s prominent role in society as a place of empowerment, creativity, publication and everyday conversation); Amul Kalia, *Congrats on the 10-Year Anniversary YouTube, Now Please Fix Content ID*, ELECTRONIC FRONTIER FOUND. (May 1, 2015), <https://www.eff.org/deeplinks/2015/05/congrats-10-year-anniversary-youtube-now-please-fix-content-id> [<https://perma.cc/Q7P6-LXU3>] (recognizing that YouTube is pioneering the development of speech and entertainment on the Internet).

² See Fred von Lohmann, *A Step Toward Protecting Fair Use on YouTube*, GOOGLE PUB. POL’Y BLOG (Nov. 19, 2015), <http://googlepublicpolicy.blogspot.com/2015/11/a-step-toward-protecting-fair-use-on.html> [<https://perma.cc/ZA96-RDTQ>] (discussing the importance of protecting fair use on YouTube); *How Content ID Works*, YOUTUBE, <https://support.google.com/youtube/answer/2797370?hl=en> [<https://perma.cc/CF8S-5KBS>] (explaining how Content ID works).

³ *About YouTube*, YOUTUBE, <https://www.youtube.com/yt/about/> [<https://perma.cc/2RSU-XLQR>] (explaining that YouTube is a platform that allows billions of people around the world to

dreds of thousands of those videos are removed from the Internet by automatic computer algorithm systems that flag them as alleged copyright infringements.⁴ Although some of those claims are meritorious, many are not.⁵ As YouTube's own computer algorithm system, Content ID, gains more users, a new level of speech censorship that exists wholly outside the law or judicial review threatens the Internet community.⁶

YouTube's Content ID is an internal computer algorithm system that allows copyright holders and content creators to detect possibly infringing videos.⁷ As more copyright holders and content creators begin to utilize Content ID, more videos are removed from the Internet for alleged copyright violations.⁸ YouTube contends that Content ID qualifies for the safe harbor provision of the Digital Millennium Copyright Act of 1998 ("DMCA"), which shields it from liability, but some industry experts believe that YouTube should be required to do more to benefit from the safe harbor.⁹ In addition, many believe that unless YouTube responds to the market's criticism of Content ID it may face an exodus of its content creators.¹⁰

communicate with each other in new and innovative ways); *see* von Lohmann, *supra* note 2 (discussing the variety of content uploaded onto YouTube).

⁴ *See* Daniel Seng, *The State of Discordant Union: An American Analysis of DMCA Takedown Notices*, 18 VA. J.L. & TECH. 369, 386 n.54 (2014) (explaining how the takedown procedures lend themselves to fraudulent abuse).

⁵ *See* Parker Higgins & Kurt Opshal, *Copyright's Robot Wars Heat Up as Algorithms Block Live-Streams First and Ask Questions Later*, ELECTRONIC FRONTIER FOUND., (Sept. 7, 2012), <https://www.eff.org/deeplinks/2012/09/copyrights-robot-wars-heat-algorithms-block-live-streams-first-and-ask-questions> [<https://perma.cc/T98Q-F9GX>] (discussing computer algorithm systems' susceptibility to false detections of infringement).

⁶ *See* Laura Leister, *YouTube and the Law: A Suppression of Creative Freedom in the 21st Century*, 37 T. MARSHALL L. REV. 109, 109 (2011) (noting that modern copyright law is in a state of disorder because of YouTube's success and desire to escape liability, the lack of legislative regulation, a YouTube uploader's fear of infringement, and the power of wealthy copyright holders); Boroughf, *supra* note 1, at 97 (discussing how Content ID's structure has a potential to chill speech and take advantage of the creativity and work of content creators who upload videos to YouTube).

⁷ *How Content ID Works*, *supra* note 2. Content ID identifies videos that are possibly infringing and may then block the video if directed to do so by the copyright holder. *Id.*

⁸ *See generally* Seng, *supra* note 4, at 377 (discussing the rapid and substantial increase in the issuance of takedown notices). For example, in 2014, Google received and analyzed thousands of takedown notices each month. *See id.*

⁹ *See* Lydia Pallas Loren, *Deterring Abuse of the Copyright Takedown Regime by Taking Misrepresentation Claims Seriously*, 46 WAKE FOREST L. REV. 745, 749 (2011) (noting that copyright law requires little from online service providers, like YouTube, in order to benefit from the safe harbors).

¹⁰ *See* Seng, *supra* note 4, at 429 (noting that content creators often switch service providers when receiving a formal takedown notice); Allegra Frank, *YouTube Is Changing the Content ID System in an Effort to Help Creators*, POLYGON (Apr. 28, 2016, 4:19 PM), <http://www.polygon.com/2016/4/28/11531228/youtube-content-id-changes-copyright-dispute-jim-sterling> [<https://perma.cc/K239-6P4M>] (describing changes YouTube will make to aid the frustrating experience of using Content ID); Patricia Hernandez, *YouTube's Content ID System Gets One Much-Needed Fix*, KOTAKU (Apr. 28, 2016, 1:48 PM), <http://kotaku.com/youtubes-content-id-system-gets-one-much-needed-fix-1773643254>

Based on the large volume of videos that Content ID improperly blocks or removes, and the shift from the notice and takedown procedures to host-provided filtering, Congress should amend the DMCA to reflect the current Internet market.¹¹ This Note argues that YouTube's Content ID should be required to consider fair use prior to issuing a Content ID match, the effective equivalent of a takedown notice.¹² It also argues that if YouTube fails to consider fair use before issuing a Content ID match, it should lose its safe harbor status under the DMCA in order to protect the YouTube community from the removal of important and lawful content.¹³ Part I reviews the applicable provisions of the DMCA, YouTube's Content ID structure, and the U.S. Court of Appeals for the Ninth Circuit's 2015 holding in *Lenz v. Universal Music Corp.*, the leading case analyzing the toll of fair use.¹⁴ Part II discusses the unexpected consequences of Content ID and the impact of *Lenz* on computer algorithm systems' liability for misrepresentation under the DMCA.¹⁵ Part III argues that Congress should require internal computer algorithm systems that police infringing content, like Content ID, to consider fair use prior to removing material and to hold YouTube liable under misrepresentation if it fails to do so.¹⁶

I. PIRATING THE INTERNET: AUTOMATED TAKEDOWN REQUESTS

With YouTube's rise in popularity, there is an increasing need to balance user autonomy and free speech with protection of copyright holders and online service providers.¹⁷ This Part examines how the DMCA and computer algorithm systems, specifically YouTube's Content ID, help police copyright infringement, and how the Ninth Circuit's holding in *Lenz* might impact their future.¹⁸ Section A explains the DMCA's takedown procedures and misrepresentation provision, as well as the doctrine of fair use.¹⁹ Section B provides a background on computer algorithm systems and explores how YouTube Con-

[<https://perma.cc/CR6C-F7Y2>] (describing the process of utilizing Content ID as "giving users huge headaches").

¹¹ See Boroughf, *supra* note 1, at 103 (noting the pros of host-provided filtering as online service providers can more rapidly and cheaply identify infringing content than copyright holders, and cons as the system exists whole outside the law and with no human oversight).

¹² See *infra* notes 148–198 and accompanying text.

¹³ See *infra* notes 148–198 and accompanying text.

¹⁴ See *infra* notes 17–119 and accompanying text.

¹⁵ See *infra* notes 120–147 and accompanying text.

¹⁶ See *infra* notes 148–198 and accompanying text.

¹⁷ See Debora Halbert, *Mass Culture and the Culture of the Masses: A Manifesto for User-Generated Rights*, 11 VAND. J. ENT. & TECH. L. 921, 937 (2009) (noting the value that YouTube and copyright law add to society).

¹⁸ See *infra* notes 22–119 and accompanying text.

¹⁹ See *infra* notes 22–67 and accompanying text.

tent ID works.²⁰ Finally, Section C discusses the facts and holding of *Lenz*, the takedown procedures, and the misrepresentation provision of the DMCA.²¹

A. *The DMCA: Friend or Foe?*

The DMCA was enacted to balance copyright holders' demands for policing copyright infringement, online service providers' demands for protection from liability for hosting infringement, and content creators' demands for protection against liability for distributing lawful content.²² To advance those goals, the DMCA created takedown procedures granting copyright holders a swift way to combat infringement, safe harbors protecting online service providers from liability if they comply with those procedures, and legal redress for content creators whose material was improperly removed.²³ The DMCA is based on the premise that copyright holders have the knowledge to determine infringing uses, service providers have the means to take down those infringing uses, and content creators will file suit against those who abuse the takedown procedures.²⁴

1. What About the Copyright Holders? How the DMCA's Takedown Procedures Benefit Copyright Holders

The DMCA offers copyright holders the speedy elimination of infringing material if they comply with the takedown notice regime.²⁵ Once a takedown notice is filed, copyright holders can obtain removal of alleged infringing material without having to file a federal copyright claim or having a court weigh in on the validity of its infringement claim.²⁶ Due to the regime's effective and quick removal of material, however, many copyright holders abuse the proce-

²⁰ See *infra* notes 68–97 and accompanying text.

²¹ See *infra* notes 98–119 and accompanying text.

²² See Adam Eakman, *The Future of the Digital Millennium Copyright Act: How Automation and Crowdsourcing Can Protect Fair Use*, 48 IND. L. REV. 631, 632 (2015) (noting that the Digital Millennium Copyright Act of 1998 (“DMCA”) attempted to strike a balance between the rights of copyright holders and the rights of those that upload to the Internet).

²³ See Digital Millennium Copyright Act of 1998, 17 U.S.C. § 512(c), (f) (2012) (listing the takedown procedures, the safe harbor requirements, and the misrepresentation provision).

²⁴ See *id.* § 512(c), (f)–(g); Eakman, *supra* note 22, at 637–38 (noting that the DMCA places the burden on copyright holders to police copyright infringement in exchange for “expeditious elimination” of infringing material, and hence “favor[ing] speed over accuracy” (alteration in original)).

²⁵ See 17 U.S.C. § 512(c) (listing the takedown procedures); Jennifer M. Urban & Laura Quilter, *Efficient Process or “Chilling Effects”? Takedown Notices Under Section 512 of the Digital Millennium Copyright Act*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 621, 636 (2006) (explaining the DMCA takedown procedures).

²⁶ See 17 U.S.C. § 512(c); Urban & Quilter, *supra* note 25, at 636 (noting that under the DMCA, alleged infringing material can be removed before a court conducts any sort of analysis).

dures by blocking negative treatment of their work or obtaining greater protection for their work than copyright allows.²⁷

To help combat the abuse of the takedown procedures, the DMCA requires copyright holders to have a good faith belief that the alleged infringing material is not authorized before issuing a takedown notice.²⁸ If the copyright holder correctly initiates a takedown request, the Internet service provider ("ISP"), for example YouTube, must then block or remove the content, as well as provide the party that posted the content, generally known as content creators, with a takedown notice.²⁹

Another check against the abuse of takedown notices is a content creator's option to file a counter notice if they believe they have improperly received a takedown notice.³⁰ Once an ISP receives a counter notice, it must provide the original party who filed the takedown request with a copy of the counter notice.³¹ The proper filing of a counter notice could lead to an alleged infringer's material being re-uploaded.³²

If a counter notice is never filed, the material may be removed permanently.³³ In fact, few counter notices are filed, despite their role as necessary checks on the takedown notice regime.³⁴ One reason may be that content creators are asked to disclose information that could open them up to liability be-

²⁷ See Loren, *supra* note 9, at 749 (discussing how copyright holders abuse the takedown procedures by filing false takedown notices); Mike Masnick, *DMCA's Notice and Takedown Procedures Is a Total Mess and It's Mainly Because of Bogus Automated Takedowns*, TECHDIRT (Mar. 30, 2016, 11:40 AM), <https://www.techdirt.com/articles/20160330/01583234053/dmcas-notice-takedown-procedure-is-total-mess-mainly-because-bogus-automated-takedowns.shtml> [<https://perma.cc/V9DH-VKUV>] (noting that automated takedown notices do not consider fair use thus rendering them fraudulent in many cases); *Takedown Hall of Shame*, ELECTRONIC FRONTIER FOUND., <https://www.eff.org/takedowns> [<https://perma.cc/NR5Y-CUTK>] (posting some of the most ridiculous and fraudulent takedown requests).

²⁸ See 17 U.S.C. § 512(c)(3) (listing the requirements of a takedown notice).

²⁹ See *id.* (stating that the complaining party must have a good faith belief that the material "is not authorized by the copyright holder, its agent, or the law"); see also Eakman, *supra* note 22, at 637 (explaining the DMCA's notice and takedown procedures). An Internet service provider ("ISP") like YouTube is incentivized to comply with the takedown process because doing so protects it from liability under the safe harbor provisions of the DMCA. See 17 U.S.C. § 512(c) (explaining how an ISP can receive safe harbor); see also *infra* notes 37–55 and accompanying text (explaining how ISPs escape liability under the DMCA).

³⁰ See 17 U.S.C. § 512(g)(3) (detailing the requirements for a counter notice); see also Loren, *supra* note 9, at 758 (analyzing the counter notice's role in protecting lawful activity from abusive takedown notices).

³¹ See 17 U.S.C. § 512(g)(2)(B) (detailing how ISPs can limit their liability).

³² See *id.* § 512(g)(2)(B)–(C).

³³ *Id.* § 512(g); see also Eakman, *supra* note 22, at 637 (explaining the process of a counter notice).

³⁴ See Loren, *supra* note 9, at 760 (discussing why many content creators do not send a counter notice).

fore filing a counter notice.³⁵ Another reason may be that content creators are simply unaware of the opportunity to file a counter notice or do not understand all of the requirements.³⁶

2. But You're Hosting It? How YouTube and Others Escape Copyright Liability Under the DMCA's Safe Harbor Provisions

The DMCA outlines four safe harbors that shield certain websites from liability for engaging with potentially infringing material.³⁷ For websites to benefit from a safe harbor, they must meet several conditions.³⁸ Congress created the safe harbors to encourage websites to cooperate with the copyright industry by policing infringing material while still permitting them to engage in technological innovation.³⁹ Congress therefore recognized that websites were incapable of monitoring all of the material on their sites, and thus the DMCA places the burden of policing potential copyright infringement on the copyright holders themselves.⁴⁰ As a result, websites like YouTube only need to cooperate when necessary to benefit from the safe harbor.⁴¹

To qualify for safe harbor protections, the website must first qualify as an ISP.⁴² If a website qualifies as an ISP, it must then meet an array of other requirements depending on the type of service it provides.⁴³ For a website like

³⁵ See 17 U.S.C. § 512(g)(3) (listing the contents of a counter notice). Section 512(g)(3) requires, among other things, for content creators to disclose their name, address, telephone number, and a statement expressing consent to jurisdiction. *See id.*

³⁶ See Loren, *supra* note 9, at 760 (suggesting that content creators may not file counter notices because they require legal expertise).

³⁷ 17 U.S.C. § 512(a)–(d); *see also* Eakman, *supra* note 22, at 636 (discussing the DMCA's safe harbor provisions). Section 512(a) creates a safe harbor for transitory digital network communications, § 512(b) creates a safe harbor for system caching, § 512(c) creates a safe harbor for information residing on systems or networks at the direction of users, and § 512(d) creates a safe harbor for information location tools. 17 U.S.C. § 512.

³⁸ See 17 U.S.C. § 512(c) (listing the conditions that service providers must meet to obtain a safe harbor).

³⁹ See S. REP. No. 105-190, at 8 (1998) (noting that without proper protection, online service providers may hesitate to make the necessary investment in the expansion of the speed and capacity of the Internet); H.R. REP. No. 105-796, at 72 (1988) (Conf. Rep.); Kevin C. Horman, *The Death of the DMCA? How Viacom v. YouTube May Define the Future of Digital Content*, 46 HOUS. L. REV. 1345, 1350 (2009) (explaining how the DMCA was established to create the legal platform for a robust Internet community).

⁴⁰ See 17 U.S.C. § 512(c)(3) (describing the requirements for an official DMCA takedown notice); Horman, *supra* note 39, at 1352 (explaining how the DMCA makes the copyright holder responsible for detecting infringement).

⁴¹ See 17 U.S.C. § 512(c); Horman, *supra* note 39, at 1350 (explaining how service providers obtain a safe harbor).

⁴² See 17 U.S.C. § 512(k)(1). The DMCA defines an ISP as “an entity offering the transmission, routing, or providing of connections for digital online communications, between or among points specified by a user, of material of the user's choosing, without modification to the content of the material as sent or received.” *Id.*

⁴³ *See id.* § 512(a)–(d).

YouTube to qualify for a safe harbor, and thus escape liability, it must meet the conditions under § 512(c).⁴⁴ Those conditions include not having actual knowledge that the material it hosts is infringing, as well as not being aware of facts or circumstances from which infringing activity is apparent.⁴⁵ If YouTube were to obtain knowledge of infringing material, it must act quickly to remove or disable access to the material.⁴⁶ In addition, YouTube must have a designated agent to receive takedown notices and must not receive any direct financial benefits from infringing material that it can reasonably control.⁴⁷

If YouTube does receive a formal takedown notice, thereby obtaining knowledge of potential infringing material, it must engage in the DMCA's takedown procedures to continue benefiting from safe harbor protection.⁴⁸ If YouTube fails to adequately comply with the takedown procedures, it loses its safe harbor protection and thus exposes itself to potential liability.⁴⁹ First, YouTube must expeditiously remove or disable access to the alleged infringing material.⁵⁰ After taking down the alleged infringing material, it must notify the content creator that its video has received a takedown notice.⁵¹ The content creator may then choose to file a counter notification disputing the alleged infringement.⁵²

If a counter notification is filed, YouTube has eleven to thirteen days to notify the copyright holder that it will replace the removed material or stop disabling access to it in, unless it receives notice that the copyright holder has

⁴⁴ See *id.* § 512(c). Section 512(c) outlines the conditions placed on information residing on systems or networks at direction of users. See *id.*

⁴⁵ See *id.* § 512(c)(1)(A).

⁴⁶ See *id.* § 512(c)(1)(A)(iii) (stating that ISPs must act "expeditiously to remove, or disable access to, the material").

⁴⁷ See *id.* § 512(c)(1)(B) (stating that an ISP must not receive direct financial benefits from infringing material that it "has the right and ability" to control). In April 2013, in *Viacom International Inc. v. YouTube, Inc.*, the U.S. District Court for the Southern District of New York on remand held that YouTube did not have the "right and ability to control" infringing content within the meaning of § 512(c)(1)(B). See *Viacom Int'l Inc. v. YouTube, Inc. (Viacom III)*, 940 F. Supp. 2d 110, 122 (S.D.N.Y. 2013). In 2012, on appeal from the Southern District's original holding in the Viacom litigation, the Second Circuit held that the "right and ability to control" means "something more" than a service provider's ability to control the content that appears on its website. See *Viacom Int'l Inc. v. YouTube, Inc. (Viacom II)*, 676 F.3d 19, 38 (2nd Cir. 2012). To constitute as "something more" and thus forfeit safe harbor protection, a service provider "must influence or participate in the infringement" rather than have knowledge of the infringing activity, or even welcome it. See *Viacom III*, 940 F. Supp. 2d at 118. The court therefore rejected Viacom's arguments that the "something more" in YouTube's case was its ability to harbor infringement, its editorial judgment over its content as it was able to remove certain content, and its function to facilitate infringing searches. See *id.* at 120.

⁴⁸ See 17 U.S.C. § 512(c). In addition, a copyright holder's official written notification of claimed infringement, referred to as a takedown notice, must comply with the requirements under § 512(c)(3). See *id.*

⁴⁹ See *id.* § 512(c).

⁵⁰ See *id.*

⁵¹ See *id.* § 512(c), (g).

⁵² See *id.*

filed a lawsuit in district court.⁵³ In sum, if YouTube correctly engages in the takedown procedures it receives protection from the safe harbor.⁵⁴ Although there are numerous requirements, they are fairly easy to meet considering that the benefit is insulation from liability.⁵⁵

3. What About Content Creators? The DMCA's Misrepresentation Provision and the Fair Use Doctrine

Although the takedown notice regime and the safe harbors offer vast protection to copyright holders and ISPs, Congress also offered content creators protection from takedown abuses by allowing them to file a federal claim for misrepresentation or to defend their work on fair use grounds.⁵⁶ Even though a misrepresentation claim and a fair use claim are distinct features, they are closely linked.⁵⁷

Congress recognized that copyright holders and content creators could over-zealously file takedown requests and counter notifications, and thus provided a federal cause of action for such abuse.⁵⁸ Entities that abuse the DMCA may be subject to liability under § 512(f), the misrepresentation provision.⁵⁹ Section 512(f) generally can be used to hold copyright holders and content creators liable for improperly engaging in the takedown notice and counter notice process.⁶⁰ The provision was created to protect copyright holders, ISPs, and content creators from false infringement allegations that could destabilize

⁵³ See *id.*

⁵⁴ See 17 U.S.C. § 512(c).

⁵⁵ See *id.* See generally Diane M. Barker, *Defining the Contours of the Digital Millennium Copyright Act: The Growing Body of Case Law Surrounding the DMCA*, 20 BERKELEY TECH. L.J. 47, 57 (2005) (explaining that the safe harbor provisions under the DMCA were designed to incentivize ISPs to comply with the requirements).

⁵⁶ See 17 U.S.C. § 512(f) (enumerating the requirements for a misrepresentation claim); Copyright Act of 1976, 17 U.S.C. § 107 (2012) (listing the four requirements used to determine whether a work is fair use).

⁵⁷ See 17 U.S.C. § 512(f) (listing the requirements for a misrepresentation claim, including “materially misrepresent[ing] . . . that material or activity is infringing” (alteration in original)); 17 U.S.C. § 107 (explaining when material or activity does not infringe on a copyright); see also *Lenz v. Universal Music Corp.* (*Lenz III*), 815 F.3d 1145, 1148 (9th Cir. 2016) (holding that a copyright holder is liable for misrepresentation if it fails to consider whether a work is fair use prior to issuing a takedown notice).

⁵⁸ See 17 U.S.C. § 512(f); Loren, *supra* note 9, at 761 (noting that the misrepresentation claim was created to deter the abuse of false takedown requests).

⁵⁹ See 17 U.S.C. § 512(f); see also *Lenz III*, 815 F.3d at 1154 (analyzing the merits of a misrepresentation claim).

⁶⁰ See 17 U.S.C. § 512(f) (stating that any individual can be held liable for misrepresenting that a material is infringing); see also *Lenz III*, 815 F.3d at 1151 (explaining that § 512(f)(1) applies to copyright holders and § 512(f)(2) applies to users).

the copyright regime, as well as to curtail the filing of takedown requests that could chill the creation and dissemination of knowledge.⁶¹

When choosing to file a federal copyright infringement or a misrepresentation claim, holders and content creators must determine whether the alleged infringing material constitutes fair use.⁶² Content creators that choose to file counter notices generally claim that their material is not infringing any copyright because it is fair use.⁶³ Although Congress does not explicitly mention what constitutes fair use in the DMCA, the Copyright Act of 1976 states that the fair use of a copyrighted work is not a copyright infringement, and therefore is authorized by the law.⁶⁴

Fair use permits the unlicensed use of copyright-protected works in certain circumstances, such as criticism, comment, news reporting, teaching, scholarship, or research.⁶⁵ The Copyright Act outlines four factors to determine whether a work is fair use: (1) the purpose and character of the use; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect on the copyrighted work.⁶⁶ The fair use doctrine thus promotes copyright's broader goal of disseminating public knowledge by recognizing that authors should not always have exclusive rights over the use of their works.⁶⁷

⁶¹ See Loren, *supra* note 9, at 761–62 (noting that false takedown requests are “detrimental to rights of holders, service providers, and Internet users”). According to Congress, the misrepresentation provision was intended to “deter knowingly false allegations to service providers in recognition that such misrepresentations are detrimental to rights of holders, service providers, and users.” S. REP. NO. 105-190, at 49 (1998). The over-filing of takedown requests could run afoul of Congress’s constitutional mandate to “promote the Progress of Science . . . by securing for limited Times to Authors . . . the exclusive Right to their [work].” See U.S. CONST. art. I, § 8, cl. 8 (alteration in original); Loren, *supra* note 9, at 761–62.

⁶² See *Lenz III*, 815 F.3d at 1148 (holding that § 512(c)(3)(A)(v) requires copyright holders to consider fair use prior to issuing takedown notice).

⁶³ See 17 U.S.C. § 107 (enumerating the four factors that must be considered in a fair use analysis); see also *Lenz v. Universal Music Corp. (Lenz I)*, 572 F. Supp. 2d 1150, 1152 (N.D. Cal. 2008) (explaining that the plaintiff’s claim against Universal was grounded on the affirmative defense of fair use).

⁶⁴ 17 U.S.C. § 107 (establishing the factors to consider when determining whether a copyright work is fair use); *Id.* § 512 (establishing limitations to copyright liability for material online).

⁶⁵ *Id.* § 107.

⁶⁶ See *id.* (enumerating the four factors that must be considered in a fair use analysis).

⁶⁷ See *id.*; see also U.S. CONST. art. I, § 8, cl. 8 (stating that copyright’s broader goal is to promote the progress of science and the arts). Although copyright law does incentivize authors to produce works by granting them exclusive rights over their productions, the fair use doctrine balances the rights of copyright holders and the interests of the public to further copyright’s constitutional purpose. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575 (1994) (explaining that from copyright’s inception, fair use has been necessary to fulfill copyright’s constitutional purpose of promoting the progress of science and the arts); *Authors Guild v. Google, Inc.*, 804 F.3d 202, 212 (S.D.N.Y. 2015) (explaining that copyright’s overall objective is to contribute to public knowledge).

*B. Copyright Is No Longer Within Human Control: Even Lawful Videos
Cannot Escape Computer Algorithm Systems*

As hundreds of millions of videos are uploaded to YouTube, the rights of copyright holders are increasingly at risk.⁶⁸ For example, thousands of videos are uploaded to YouTube everyday either displaying a cover of a Taylor Swift song or playing the song in the background.⁶⁹ The possibility or practicality of Taylor Swift's legal team finding every infringing video is slim and onerous.⁷⁰ For owners of copyrighted works, computer algorithm systems that utilize an automated process to find possibly infringing videos are an efficient solution.⁷¹

1. Let Computers Do It: The Emergence of Automated Takedown Requests on the Internet

Computer algorithm systems that search the Internet for copyright infringements enable copyright holders who hold thousands of copyrights to identify and rapidly remove infringing material.⁷² Some businesses choose to hire outside firms to do their policing, yet some websites that host third-party material employ an in-house automated process.⁷³ Generally, the automated process includes searching keywords related to the copyrighted content.⁷⁴ If alleged infringing material is identified, the system automatically sends a takedown notice to the host of the material, generally a website, in order to remove it from the Internet.⁷⁵ If the host of the material is, for example, YouTube,

⁶⁸ See Sean M. O'Connor, *Creators, Innovators, and Appropriation Mechanisms*, 22 GEO. MASON L. REV. 973, 980, 987 (2015) (recognizing the innovation that occurs on YouTube, while noting that all creators need a platform where they can turn their ideas into reality).

⁶⁹ See Sharon Lynn Pruitt, *Taylor Swift Gets Couple's Wedding Video Muted Over Copyright Claim*, OXYGEN (Oct. 12, 2015, 3:19 PM), <http://www.oxygen.com/very-real/taylor-swift-gets-couples-wedding-video-muted-over-copyright-claim> [<https://perma.cc/WJ9T-L5K3>] (discussing how YouTube muted a couple's wedding video because a Taylor Swift song played in the background of the video).

⁷⁰ See *Lenz v. Universal Music Corp. (Lenz II)*, 801 F.3d 1126, 1135 (9th Cir.), *amended by* 815 F.3d 1145 (9th Cir. 2015) (noting the overwhelming amount of material copyright holders have to review when policing infringement).

⁷¹ See *id.* (describing how computer algorithm systems can help copyright holders efficiently detect possible infringement).

⁷² See Eakman, *supra* note 22, at 638 (noting that computer algorithm systems enable companies to utilize their human capital on more important matters than searching millions of videos for potentially infringing material).

⁷³ See *id.* (discussing how various companies issue automated takedown requests); *How Content ID Works*, *supra* note 2 (explaining YouTube's in-house automated system for policing infringing content).

⁷⁴ See Eakman, *supra* note 22, at 638 (explaining the process Microsoft's third-party firm utilized when issuing takedown requests); *How Content ID Works*, *supra* note 2 (explaining how Content ID utilizes keywords and phrases to police possible infringing content).

⁷⁵ See Eakman, *supra* note 22, at 639 (explaining how Google received a takedown notice from Microsoft to remove alleged infringing parts from Microsoft's own website).

a copyright holder can have the video removed in minutes if YouTube's own automated system detects it as possibly infringing.⁷⁶ Thus, the entire process from which a lawful video may be removed from the Internet can escape human review.⁷⁷

2. YouTube Content ID for the Win: The Structure of YouTube Content ID

For years, YouTube has faced litigation for hosting copyright infringing content.⁷⁸ Although many believed that YouTube was exempt from liability under the statutory safe harbor provision, many also criticized YouTube for not monitoring its own website for infringing material.⁷⁹ YouTube responded to

⁷⁶ See *id.* at 633 (discussing how Content ID first scans uploaded videos against its reference of keywords and phrases and sends a notice to the copyright holder if it detects possible infringement); *How Content ID Works*, *supra* note 2 (explaining how a copyright holder can have a video removed once it receives a possible infringement notice from Content ID).

⁷⁷ See Eakman, *supra* note 22, at 639 (noting that the takedown process "had little human oversight and was prone to error"). If creators of the alleged infringing material wish to re-upload their video, there are further steps they could take. See 17 U.S.C. § 512(f), (g)(3). If a person wishes to contest a takedown notice, they can issue a counter-notification to the host; for example, YouTube. See 17 U.S.C. § 512(g)(3). If the copyright holder wishes to pursue further action, they may file a lawsuit in court. See *id.* § 512(f).

⁷⁸ See, e.g., *Viacom Int'l Inc. v. YouTube, Inc. (Viacom I)*, 718 F. Supp. 2d 514, 516 (S.D.N.Y. 2010). In 2007, Viacom filed a suit against YouTube for showing over 79,000 copyrighted videos. *Id.*; Jonathan Stempel, *Google, Viacom Settle Landmark YouTube Lawsuit*, REUTERS (Mar. 18, 2014, 11:13 AM), <http://www.reuters.com/article/2014/03/18/us-google-viacom-lawsuit-idUSBREA2H11220140318#16c42LbzoqIzPH7v.97> [<https://perma.cc/8SXG-HFJZ>] (discussing the seven-year settlement litigation between Google and Viacom over Google's alleged infringing posts on YouTube).

⁷⁹ See, e.g., *Viacom I*, 718 F. Supp. 2d at 516; Lital Helman, *Pull Too Hard and the Rope May Break: On the Secondary Liability of Technology Providers for Copyright Infringement*, 19 TEX. INTEL. PROP. L.J. 111, 143 (2010) (noting YouTube's entitlement to the DMCA's safe harbor provision); Kalia, *supra* note 1 (discussing how YouTube created Content ID to address concerns that it did not adequately police its own site); Pruitt, *supra* note 69 (criticizing YouTube for wrongly removing videos entitled to fair use). YouTube alleged that they were entitled to the safe harbor provision provided in § 512(c). See *id.* That provision states:

(c) Information residing on systems or networks at direction of users.—

(1) In general.—A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider, if the service provider—

(A)(i) does not have actual knowledge that the material or an activity using the material on the system or network is infringing;

(ii) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent; or

(iii) upon obtaining such knowledge or awareness, acts expeditiously to remove, or disable access to, the material;

(B) does not receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity; and

the criticism, acknowledging that its copyright holders needed help identifying pirated material, and that its content creators needed protection to continue creating lawful content that attracts consumers to its website.⁸⁰

In addition to meeting the interests of copyright holders and content creators, Content ID was also an innovative business strategy that allowed YouTube to partner with copyright holders in order to generate and share advertising revenue.⁸¹ Content ID is YouTube's in-house automated system that enables copyright holders to identify videos that include material they own.⁸² Copyright holders first give copies of audio and video files to YouTube, YouTube then converts those files into reference files, and then stores them on its own database.⁸³ As of November 2015, Content ID contained three million files.⁸⁴

Content ID monitors videos during the period when they are uploaded, but not yet published.⁸⁵ When a video is uploaded, it is compared to the reference files on the database.⁸⁶ Content ID compares the video to its reference files on audio grounds, video grounds, partial comparison, and even when one video's quality is worse than another.⁸⁷ If Content ID identifies a match, it sends a Content ID claim to the content creator.⁸⁸ After sending a Content ID claim, YouTube executes the copyright holder's demand to either mute the audio that matches their music, block the entire video, make profits off of the video by running advertisements, or track the video's views.⁸⁹ Content ID can

(C) upon notification of claimed infringement as described in paragraph (3), responds expeditiously to remove, or disable access to, the material that is claimed to be infringing or to be the subject of infringing activity.

17 U.S.C. § 512(c).

⁸⁰ See Kalia, *supra* note 1 (noting that Content ID was created as a response to YouTube's lack of policing); *How Content ID Works*, *supra* note 2. See generally Abigail R. Simon, *Contracting in the Dark: Casting Light on the Shadows of Second Level Agreements*, 5 WM. & MARY BUS. L. REV. 305, 315 (2014) (discussing the development and nuances of Content ID).

⁸¹ See Simon, *supra* note 80, at 308 (discussing the various reasons YouTube created Content ID, including the development of a new stream of revenue).

⁸² *How Content ID Works*, *supra* note 2; see Simon, *supra* note 80, at 308 (describing how Content ID works).

⁸³ *How Content ID Works*, *supra* note 2. YouTube only grants access to Content ID to certain copyright holders. *Id.* A holder must exclusively own the rights "to a substantial body of original material that is frequently uploaded by the YouTube user community." *Id.* Additionally, YouTube retains the authority to revoke a holder's access to Content ID if they repeatedly make erroneous claims. *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ See *How Content ID Works*, *supra* note 2. Additionally, Content ID allows the copyright holder to take different actions in different countries, allowing a holder to block a video in China while monetizing it in Italy. *Id.*

also perform a “legacy scan” to identify videos that match before the copyright holder signed onto Content ID.⁹⁰

If content creators choose to challenge a Content ID match, they have a difficult task ahead of them.⁹¹ Copyright holders have thirty days to determine whether the video that Content ID matched infringes on their copyright.⁹² If a copyright holder decides that it does, the content creator has the opportunity to accept the usage restrictions or to dispute the claim.⁹³ If the content creator disputes the claim, the copyright holder then gets to decide whether to drop the claim or uphold it.⁹⁴ If the copyright holder upholds the claim, the content creator can either accept the restrictions or appeal it.⁹⁵ If the content creator chooses to appeal, the copyright holder can drop the claim or file a formal takedown request.⁹⁶ Every content creator, however, may not be qualified to appeal.⁹⁷

⁹⁰ *Id.* A complete legacy scan could take a couple of months. *Id.*

⁹¹ *Id.*; see Kalia, *supra* note 1 (explaining the Content ID process and noting that Content ID disenfranchises content creators). For example, a video that went viral, “Evolution of Dance,” could have received thirty-two Content ID matches. See Kalia, *supra* note 1. With such a high number of matches, it would have been practically impossible for the video’s creator to contest each claim. See *id.* Moreover, if the video’s creator had chosen such a path, the video might not have gone viral. See *id.*

⁹² *How Content ID Works*, *supra* note 2.

⁹³ *Id.*; see also *A Guide to YouTube Removals*, ELECTRONIC FRONTIER FOUND., <https://www.eff.org/issues/intellectual-property/guide-to-youtube-removals> [<https://perma.cc/7SCS-KVJE>] (explaining the process of Content ID matches and appeals).

⁹⁴ *A Guide to YouTube Removals*, *supra* note 93; *How Content ID Works*, *supra* note 2.

⁹⁵ *A Guide to YouTube Removals*, *supra* note 93; *How Content ID Works*, *supra* note 2..

⁹⁶ *A Guide to YouTube Removals*, *supra* note 93; *How Content ID Works*, *supra* note 2. The process on how to file a formal takedown request is provided in § 512(c)(3)(A):

- (i) A physical or electronic signature of a person authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.
- (ii) Identification of the copyrighted work claimed to have been infringed, or, if multiple copyrighted works at a single online site are covered by a single notification, a representative list of such works at that site.
- (iii) Identification of the material that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate the material.
- (iv) Information reasonably sufficient to permit the service provider to contact the complaining party, such as an address, telephone number, and, if available, an electronic mail address at which the complaining party may be contacted.
- (v) A statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law.
- (vi) A statement that the information in the notification is accurate, and under penalty of perjury, that the complaining party is authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.

17 U.S.C. § 512(c)(3)(A).

⁹⁷ See Kalia, *supra* note 1 (explaining that only content creators whose accounts are in good standing can appeal, and a maximum of three appeals are allowed at a given time per user).

C. *Lenz v. Universal Music Corp.: The Ninth Circuit Brings Fair Use to Improper Takedown Requests*

This section discusses the Ninth Circuit's decision in *Lenz*.⁹⁸ *Lenz* held that an entity must consider fair use before issuing a formal takedown request, but did not address what that consideration must entail.⁹⁹

1. Background on *Lenz*

On February 8, 2007, Stephanie Lenz uploaded a twenty-nine second video to YouTube showcasing her young child dancing to the song, "Let's Go Crazy" by the late-artist Prince.¹⁰⁰ On June 4, 2007, Universal Music Corp. ("Universal"), the song's copyright holder, sent YouTube a takedown notice request demanding that YouTube remove the video because it violated Universal's copyright to the song.¹⁰¹ YouTube then e-mailed Lenz, notifying her that her video had been removed.¹⁰² On June 27, 2007, Lenz sent YouTube a counter notification, asserting that her video constituted fair use and demanding that her video be re-uploaded.¹⁰³ About six weeks later, YouTube re-uploaded the video.¹⁰⁴

In April 2008, Lenz filed her final amended complaint against Universal for alleged misrepresentation under § 512(f).¹⁰⁵ Lenz claimed that Universal was

⁹⁸ See *infra* notes 99–118 and accompanying text.

⁹⁹ *Lenz II*, 801 F.3d at 1135.

¹⁰⁰ *Lenz I*, 572 F. Supp. 2d at 1151–52.

¹⁰¹ See *id.* at 1152. Universal's review process before initiating a takedown request included evaluating whether the video "'embodied a Prince composition' by making 'significant use of . . . the composition, specifically if the song was recognizable, was in a significant portion of the video or was the focus of the video.'" *Lenz II*, 801 F.3d at 1129. Universal's video evaluation guidelines, however, did not explicitly include consideration of the fair use doctrine. See *id.*

¹⁰² See *Lenz I*, 572 F. Supp. 2d at 1152. YouTube's e-mail also instructed Lenz of the DMCA's counter notification process as well as the possibility of having her channel removed for multiple violations of copyright. See *id.*

¹⁰³ See *id.*

¹⁰⁴ See *id.*

¹⁰⁵ See *id.* at 1153. Section 512(f) provides:

Any person who knowingly materially misrepresents under this section—

- (1) that material or activity is infringing, or
 - (2) that material or activity was removed or disabled by mistake or misidentification,
- shall be liable for any damages, including costs and attorneys' fees, incurred by the alleged infringer, by any copyright owner or copyright owner's authorized licensee, or by a service provider, who is injured by such misrepresentation, as the result of the service provider relying upon such misrepresentation in removing or disabling access to the material or activity claimed to be infringing, or in replacing the removed material or ceasing to disable access to it.

17 U.S.C. § 512(f). In July 2007, Lenz had filed her first complaint alleging misrepresentation and tortious interference with her contract with YouTube. See *Lenz I*, 572 F. Supp. 2d at 1153. Lenz had also sought a declaratory judgment of non-infringement. See *id.* Her final amended complaint only alleged a claim for misrepresentation under § 512(f). See *id.* On January 24, 2013, the district court

liable for misrepresentation because it knowingly failed to comply with the takedown procedures in § 512(c).¹⁰⁶ Lenz asserted that Universal did not form a good faith belief that her video was “not authorized,” because it did not consider whether her video was fair use.¹⁰⁷

2. Considering Fair Use Before Issuing a Takedown Notice

The Ninth Circuit began its analysis by acknowledging that an entity can be liable for misrepresentation under § 512(f) for improperly issuing a takedown notice, thus bringing unity to the takedown procedures in § 512(c) and the misrepresentation provision in § 512(f).¹⁰⁸ The court then determined whether the DMCA's takedown procedures required copyright holders to consider fair use—an issue of first impression across all circuits in the nation.¹⁰⁹

The Ninth Circuit agreed with the district court, holding that § 512(c) requires an entity to consider fair use before issuing a takedown notice.¹¹⁰ In reaching its decision, the court reasoned that the Copyright Act “explains that the fair use of a copyrighted work is permissible because it is not an infringement of copyright.”¹¹¹ The court thus rejected Universal's argument that fair use is an

denied both Universal's and Lenz's motions for summary judgment and certified its order for interlocutory appeal. *See Lenz III*, 815 F.3d at 1150. On September 14, 2015, the Ninth Circuit filed its opinion and on March 17, 2016, it filed its amended opinion. *See id.*

¹⁰⁶ *See Lenz I*, 572 F. Supp. 2d at 1154. Specifically, § 512(c) requires a party to “ha[ve] a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner” before issuing a takedown notice. 17 U.S.C. § 512(c)(3)(A)(v) (alteration in original).

¹⁰⁷ *See Lenz I*, 572 F. Supp. 2d at 1154; *see also* 17 U.S.C. § 512(c) (describing how ISPs can escape liability even if hosting infringing material).

¹⁰⁸ *See Lenz III*, 815 F.3d at 1151 (stating that an entity that abuses the DMCA, may be subject to liability under § 512(f)). Section 512(f) generally holds copyright holders and content creators liable for improperly engaging in the takedown notice and counter notice process. *See* 17 U.S.C. § 512(f). The importance of *Lenz* on the future of copyright and the DMCA is bolstered by the fact that Ninth Circuit issued the decision. *See* William K. Ford, *Judging Expertise in Copyright Law*, 14 J. INTELL. PROP. L. 1, 42 (2006) (asserting that the Ninth Circuit is one of the most influential courts in the development of copyright law).

¹⁰⁹ *See Lenz III*, 815 F.3d at 1151. Section 512(c)(3)(A)(v) requires a takedown notification to include “statement that the complaining party has a good faith belief that the use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law.” 17 U.S.C. § 512(c)(3)(A)(v).

¹¹⁰ *Compare Lenz III*, 815 F.3d at 1151 (holding that § 512(c) “unambiguously contemplates fair use as a use authorized by the law”), *with* *Tuteur v. Grosley-Concoran*, 961 F. Supp. 2d 333, 343–44 (D. Mass. 2013) (holding that § 512(c) does not require an entity to consider fair use prior to initiating a takedown notice).

¹¹¹ *See Lenz III*, 815 F.3d at 1152. Section 107 of the Copyright Act provides: “the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright” 17 U.S.C. § 107 (emphasis added).

affirmative defense and thus not “authorized by the law.”¹¹² The Ninth Circuit concluded that fair use is “authorized by law” because the Copyright Act created a non-infringing use, and therefore a copyright holder must consider the existence of fair use before sending a takedown notice.¹¹³

After concluding that an entity must consider fair use prior to issuing a takedown request, the court analyzed whether Universal knowingly misrepresented that it had formed a good faith belief that the video did not constitute fair use.¹¹⁴ The court clarified that Universal only needed to show that it formed a subjective good faith belief that the video was not fair use.¹¹⁵ Thus, an entity is liable under § 512(f) if it: (1) ignores or neglects a consideration of fair use before sending a takedown notice, or (2) claims it formed a good faith belief that the video was not fair use when evidence shows otherwise.¹¹⁶ Lenz contended that Universal was liable because it had not formed any belief regarding the video’s fair use.¹¹⁷ Universal, however, contended that its procedures were equivalent to a consideration of fair use, even though they were not labeled as such.¹¹⁸ Ultimately, the court denied both parties’ motions for cross summary judgment on the misrepresentation claim.¹¹⁹

II. COMPUTER ALGORITHM SYSTEMS AND FAIR USE

Although some first championed computer automated systems like Content ID, today they face significant criticism.¹²⁰ This Part reviews how computer algorithm systems have affected the Internet community and copyright law.¹²¹ Section A examines the unintended consequences of computer algorithm systems and Content ID.¹²² Section B reviews how the U.S. Court of

¹¹² See *Lenz III*, 815 F.3d at 1152. The Ninth Circuit expressly rejected the notion that fair use is an affirmative defense, stating: “[fair use] as an affirmative defense that excuses conduct is a misnomer: . . . ‘it is better viewed as a right granted by the Copyright Act of 1976.’” *Id.* (alteration in original) (quoting *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1542 n.22 (11th Cir. 1996)).

¹¹³ *Id.* at 1151–52.

¹¹⁴ See *id.* at 1153. The court rejected the district court’s finding that Lenz may proceed under a willful blindness theory, instead asserting that Lenz may proceed under an actual knowledge theory. See *id.* The court explained that Lenz could not proceed under a willful blindness theory because it had failed to meet the first factor of the *Global-Tech* Test. See *id.* at 1155. According to the court, under that test, a plaintiff must establish two factors: “(1) the defendant must subjectively believe that there is a high probability that a fact exists and (2) the defendant must take deliberate actions to avoid learning of that fact.” See *id.* (quoting *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754 (2011)).

¹¹⁵ *Id.* at 1154–55.

¹¹⁶ See *id.* The court explained that it was “in no position to dispute the copyright holder’s belief even if [it] would have reached the opposite conclusion.” *Id.* at 1154 (alteration in original).

¹¹⁷ See *id.*

¹¹⁸ See *Lenz III*, 815 F.3d at 1154.

¹¹⁹ See *id.* at 1158.

¹²⁰ See, e.g., Kalia, *supra* note 1 (discussing examples of improper Content ID matches).

¹²¹ See *infra* notes 124–147 and accompanying text.

¹²² See *infra* notes 124–141 and accompanying text.

Appeals for the Ninth Circuit's 2015 holding in *Lenz v. Universal Music Corp.* affects computer algorithm systems.¹²³

A. Unexpected Consequences of Computer Algorithms and Content ID

Although automated takedown notices help large companies police the Internet for copyrighted material, they also ensnare many lawful uses of non-infringing material.¹²⁴ Those systems thereby test which values are at the heart of a business: efficiency or accuracy.¹²⁵ The automated systems save huge businesses time and money in detecting and removing infringing material, but they frequently err in identifying that material.¹²⁶ Moreover, a business may wind up paying for an improper mistake in court.¹²⁷

Yet although thousands of lawful videos are taken down each day for alleged copyright infringement, few lawsuits are initiated against the companies that issued improper takedowns.¹²⁸ An impediment to holding companies liable for improper takedown notices is the lack of transparency regarding how exactly companies utilize computer algorithm systems to police the Internet for pirating material.¹²⁹ Another issue is the lack of enforcement power courts have given to the misrepresentation provision.¹³⁰

Since its launch, Content ID has received significant negative attention because it has incorrectly matched thousands of lawful videos as infringing on

¹²³ See *infra* notes 142–147 and accompanying text.

¹²⁴ Kalia, *supra* note 1. For example, the record label Total Wipes' automated system attempted to protect a song called "Rock the Base & Bad Format" by targeting any site that had the words "rock" and "base" in it. *Id.* That meant targeting stories about "rock" climbing and a festival about "rock" music located on a military "base." *Id.*

¹²⁵ See Eakman, *supra* note 22, at 634 (discussing some of the short comings of automated systems).

¹²⁶ *Id.*

¹²⁷ See Digital Millennium Copyright Act of 1998, 17 U.S.C. § 512(f) (2012) (allowing those who have received a wrongful takedown request to bring suit in federal court).

¹²⁸ See Loren, *supra* note 9, at 776–81 (discussing various issues as to why few misrepresentation claims are filed, despite the number of false takedown notices).

¹²⁹ See Mike Masnick, *Warner Bros. Has to Reveal the Process by Which It Sends Automated DMCA Takedowns*, TECHDIRT (Sept. 29, 2014, 12:30 PM), <https://www.techdirt.com/articles/20140928/06504828658/warner-bros-has-to-reveal-process-which-it-sends-automated-dmca-takedowns.shtml> [<https://perma.cc/AL8Y-HLH5>] (discussing the lack of transparency regarding copyright policing methods and its effect on enforcing misrepresentation claims). Warner Bros. was sued for abusing the copyright takedown process. *Disney Enters., Inc. v. Hotfile Corp.*, No. 11-20427-CIV, 2013 WL 6336286, at *1 (S.D. Fla. Sept. 20, 2013). To determine whether Warner Bros. improperly sent down takedown notices, the court ordered Warner Bros. to disclose its computer algorithm system. *Id.* at *48.

¹³⁰ See 17 U.S.C. § 512(f) (describing the requirements of a misrepresentation suit); Loren, *supra* note 9, at 776–79 (attributing the lack of misrepresentation claims to attorneys' fees and the complexity of standing and personal jurisdiction).

a copyright.¹³¹ Many uses of copyrighted material are in fact completely legal, yet Content ID is unable to distinguish lawful use from unlawful use.¹³² Accordingly, lawful videos are removed or blocked without any human oversight if a copyright holder has contracted with YouTube to block or remove a video when a match is made.¹³³ Given the fact that the process of disputing a Content ID match favors the copyright holder rather than the content creator, speech may go censored for weeks, even years.¹³⁴ The effects of Content ID are thus similar to the effects of an official takedown request through the Digital Millennium Copyright Act of 1998 (“DMCA”), yet content creators are not allowed to hold parties liable for misrepresenting a false or fraudulent Content ID match because it is not technically a takedown request.¹³⁵

In addition to censoring speech, Content ID allows copyright holders to abuse the system by permitting them to monetize off of videos, many of which are not infringing.¹³⁶ Rather than choosing to block or remove a video, most copyright holders choose to monetize the video through advertisement revenue.¹³⁷

In response to the criticism that Content ID—and other automated systems like it—sweep in too many innocent videos, YouTube rolled out a new program that offers more protection to its content creators.¹³⁸ The program

¹³¹ See Kalia, *supra* note 1 (discussing examples of improper Content ID matches). For example, Content ID improperly matched a person’s nature video because a media company, Rumblefish, claimed to own the soundtrack of singing birds. Alex Pasternack, *NASA’s Mars Rover Crashed into a DMCA Takedown*, MOTHERBOARD (Aug. 6, 2012, 11:49 AM), <http://motherboard.vice.com/blog/nasa-s-mars-rover-crashed-into-a-dmca-takedown> [<https://perma.cc/DQ2P-3VVX>].

¹³² See Copyright Act of 1976, 17 U.S.C. § 107 (2012). Under § 107, the use of a copyrighted material is authorized when it is used “for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research.” *Id.*

¹³³ See *How Content ID Works*, *supra* note 2 (explaining how a copyright holder can choose to have a video blocked or removed if a match is made).

¹³⁴ See Amul Kalia, *Casualty of YouTube’s “Contractual Obligations”: User’s Free Speech*, ELECTRONIC FRONTIER FOUND. (Nov. 13, 2015), <https://www.eff.org/deeplinks/2015/11/casualty-youtubes-contractual-obligations-users-free-speech> [<https://perma.cc/2JKW-FXSV>] (noting how Content ID’s “contractual obligations” create obstacles to the lawful dissemination of communication).

¹³⁵ See 17 U.S.C. § 512(c)(3) (outlining the requirements of a takedown notice); Simon, *supra* note 80, at 323 (noting that Content ID exists outside of federal copyright law).

¹³⁶ See Simon, *supra* note 80, at 316; *What Is a Content ID Claim?*, YOUTUBE HELP, <https://support.google.com/youtube/answer/6013276> [<https://perma.cc/T9W6-ACKC>] (explaining that copyright holders can choose to monetize off of a video by placing an advertisement over it).

¹³⁷ See Simon, *supra* note 80, at 305 (noting that from 2008 to 2014, copyright holders chose to make profits on 90% of Content ID matches); *What Is a Content ID Claim?*, *supra* note 136. The agreement between YouTube and the copyright holder, however, may be unenforceable as they affect the content creator, a third-party not part of the agreement. See, e.g., Simon, *supra* note 80, at 307 (discussing YouTube’s potential liability regarding the advertisement agreements between it and copyright holders).

¹³⁸ See Cecilia Kang, *YouTube to Pay Fees for Some Video Makers to Fight Takedowns*, N.Y. TIMES (Nov. 19, 2015), http://www.nytimes.com/2015/11/20/technology/youtube-to-pay-fees-for-some-video-makers-to-fight-takedowns.html?_r=2 [<https://perma.cc/5RAC-P4FC>] (explaining that on

sponsors the legal costs of certain content creators that are the targets of improper takedown requests.¹³⁹ Those content creators legally use copyrighted material under the fair use provisions of the Copyright Act of 1976.¹⁴⁰ YouTube explained that its goal is to protect free speech as well as strengthen its ties with its content creators.¹⁴¹

B. The Lenz Take on Computer Algorithm Systems

In March 2016, the Ninth Circuit released an amended opinion in *Lenz*, no longer discussing the effects of its holding on computer algorithm systems.¹⁴² The fact that the court redacted language hinting that computer algorithms are capable of sufficiently considering fair use suggests that computer algorithms may in fact not be safe under its holding.¹⁴³ In its pre-amended opinion, the court, in dicta, commented on how its holding could impact the use of computer algorithm systems.¹⁴⁴ The court held that the DMCA's takedown procedures require an entity to consider fair use, yet the court further explained that the formation of a good faith belief does not require extensive investigation of the alleged infringing content.¹⁴⁵

The court explained that the use of computer algorithms may sufficiently consider fair use if they automatically identify content where “(1) the video track matches the video track of a copyrighted work submitted by a content owner; (2) the audio track matches the audio track of that same copyrighted work; and (3)

November 19, 2015, YouTube announced its new program that aims to offer more legal protection to its content creators by agreeing to pay for attorney fees).

¹³⁹ See *id.*; see also Amul Kalia, *YouTube Backs Its Users with New Fair Use Protection Program*, ELECTRONIC FRONTIER FOUND. (Nov. 19, 2015), <https://www.eff.org/deeplinks/2015/11/youtube-backs-its-users-new-fair-use-protection-program> [<https://perma.cc/EX25-CLWS>] (discussing the details of YouTube's new fair use protection program); von Lohmann, *supra* note 2 (explaining the details of YouTube's fair use program).

¹⁴⁰ von Lohmann, *supra* note 2. YouTube identifies eligible creators as those that use copyrighted material in the form of commentary, criticism, news or parody—otherwise known as fair use. *Id.*; see also 17 U.S.C. § 107 (enumerating the four factors that must be considered in a fair use analysis). An example of a channel that YouTube has agreed to defend is one dedicated to revealing the truth behind unidentified flying objects. Kang, *supra* note 138. As of November 19, 2015, that channel had received three takedown requests. *Id.* The owner of the channel stated: “It was very gratifying to know [YouTube] cares about fair use and to single out someone like me.” *Id.* (alteration in original).

¹⁴¹ von Lohmann, *supra* note 2.

¹⁴² See *Lenz v. Universal Music Corp. (Lenz III)*, 815 F.3d 1145, 1145–61 (9th Cir. 2016).

¹⁴³ See *id.*

¹⁴⁴ See *Lenz v. Universal Music Corp. (Lenz II)*, 801 F.3d 1126, 1135 (9th Cir.), *amended by* 815 F.3d 1145 (9th Cir. 2015) (stating “without passing judgment, that the implementation of computer algorithms appears to be a valid and good faith middle ground for processing a plethora of content while still meeting the DMCA's requirements to somehow consider fair use”).

¹⁴⁵ See *id.* (“[I]n the majority of cases, a consideration of fair use prior to issuing a takedown notice will not be so complicated as to jeopardize a copyright owner's ability to respond rapidly to potential infringements” (quoting *Lenz v. Universal Music Corp. (Lenz I)*, 572 F. Supp. 2d 1150, 1155 (N.D. Cal. 2008))).

nearly the entirety . . . is comprised of a single copyrighted work.”¹⁴⁶ The court, however, did note that copyright holders could then employ individuals to review the “minimal remaining content” a computer algorithm does not cover; suggesting that human review is still necessary for a fair use analysis.¹⁴⁷

III. A PARALLEL UNIVERSE: YOUTUBE’S CONTENT ID VERSUS THE DMCA

To monitor infringing content, YouTube now employs two different systems.¹⁴⁸ First, it still engages in the Digital Millennium Copyright Act of 1998 (“DMCA”) formal takedown process where it promptly removes or blocks infringing videos once it receives a formal takedown notice from copyright holders.¹⁴⁹ Content creators whose material is targeted through the formal takedown process benefit from the ability to file a counter notice and a misrepresentation suit against those who filed a wrongful takedown notice.¹⁵⁰ Second, YouTube employs its own computer-automated system, Content ID, that notifies copyright holders of potential infringing content.¹⁵¹ Content creators whose material Content ID identifies as possibly infringing, however, do not have the benefit of filing a counter notification or misrepresentation claim.¹⁵²

Despite the overlap between Content ID’s effects and those of the formal takedown process, in removing and blocking videos, Content ID operates wholly outside the DMCA and judicial review.¹⁵³ To bridge the gap between the two copyright policing forces, some of the limitations placed on formal takedowns should also apply to Content ID.¹⁵⁴ Specifically, Content ID’s inability to con-

¹⁴⁶ *Id.* (quoting Brief for the Org. for Transformative Works, Public Knowledge & Int’l Documentary Ass’n as Amici Curiae Supporting Appellee at 29–30 n.8). *But see* 17 U.S.C. § 107 (outlining the four factor analysis to determine whether an activity is fair use).

¹⁴⁷ *See Lenz II*, 801 F.3d at 1136.

¹⁴⁸ *How Content ID Works*, *supra* note 2.

¹⁴⁹ *Id.*

¹⁵⁰ Digital Millennium Copyright Act of 1998, 17 U.S.C. § 512(f), (g)(3) (2012) (describing the requirements of a misrepresentation suit and a counter notice).

¹⁵¹ *How Content ID Works*, *supra* note 2.

¹⁵² *Id.*; 17 U.S.C. § 512(f), (g)(3) (describing the requirements of a misrepresentation suit and a counter notice).

¹⁵³ *See* 17 U.S.C. § 512(c) (describing the takedown procedures); Simon, *supra* note 80, at 323 (noting that Content ID exists outside of federal copyright law); *How Content ID Works*, *supra* note 2 (explaining how a content creator can contest a Content ID match and omit filing a misrepresentation claim in federal court).

¹⁵⁴ *See* 17 U.S.C. § 512(f)–(g); *Lenz v. Universal Music Corp. (Lenz III)*, 815 F.3d 1145, 1151 (9th Cir. 2016) (holding that a fair use analysis is required prior to issuing a takedown notice); Simon, *supra* note 80, at 323 (noting that Content ID exists outside of federal copyright law).

sider fair use should prohibit YouTube from safe harbor status, exposing it to liability for misrepresentation under § 512(f) of the DMCA.¹⁵⁵

Content ID disrupts the Internet community by blocking or removing lawful videos without giving content creators the same bundle of rights that they otherwise have under the DMCA—most importantly, the right to file a misrepresentation claim.¹⁵⁶ In reality, YouTube knows that Content ID is incapable of considering fair use and thus misrepresenting that it has a good faith belief that the video is not authorized by the law.¹⁵⁷ Even though a Content ID match is not

¹⁵⁵ See *Lenz III*, 815 F.3d at 1145–61 (omitting reference to computer algorithms capability of considering fair use); 17 U.S.C. § 512(c) (outlining the requirements for safe harbor status). Section 512(f) states that

any person who knowingly materially misrepresents . . . (1) that material or activity is infringing . . . shall be liable for any damages . . . incurred by the alleged infringer . . . as the result of the service provider relying upon such misrepresentation in removing or disabling access to the material or activity claimed to be infringing, or in replacing the removed material or ceasing to disable access to it.

17 U.S.C. § 512(f); see also *Viacom Int'l Inc. v. YouTube, Inc. (Viacom II)*, 676 F.3d 19, 30 (2nd Cir. 2012) (holding that YouTube is disqualified from its safe harbor under the DMCA if it has actual knowledge or awareness of facts or circumstances that indicated specific and identifiable instances of infringement). Content ID compares a video to its reference files on audio grounds, video grounds, partial comparison, and even when one video's quality is worse than another. *How Content ID Works*, *supra* note 2. If Content ID identifies a material as potentially infringing, the video may be removed or blocked if the copyright holder has contracted with Content ID to do so. *Id.* Thus, Content ID's system is not a proper fair use analysis under the Copyright Act of 1976. See Copyright Act of 1976, 17 U.S.C. § 107 (2012) (enumerating the fair use factors). Moreover, it is highly doubtful that computer algorithm systems are capable of conducting a proper fair use analysis due to the fact intensive nature of such an analysis. See *Lenz III*, 815 F.3d at 1145–61 (omitting mention of computer algorithms' capability of conducting a fair use analysis).

¹⁵⁶ See 17 U.S.C. § 107 (stating that an entity must consider four factors when determining whether a video is fair use); *Lenz III*, 815 F.3d at 1151 (holding that an entity is required to consider fair use before issuing a takedown notice under § 512(c), and that an entity's failure to do so makes them liable under § 512(f)); *How Content ID Works*, *supra* note 2 (explaining that Content ID compares a video to its reference files on audio grounds, video grounds, partial comparison, and even when one video's quality is worse than another). Section 107 provides:

In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
 - (2) the nature of the copyrighted work;
 - (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
 - (4) the effect of the use upon the potential market for or value of the copyrighted work.
- The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

17 U.S.C. § 107; *id.* § 512(f) (allowing parties to file a misrepresentation claim for false or fraudulent takedown notices).

¹⁵⁷ See, e.g., *Lenz III*, 815 F.3d at 1151 (holding that an entity must consider fair use before issuing a takedown notice under § 512(c), and that an entity's failure to do so makes them liable under § 512(f)); *How Content ID Works*, *supra* note 2. Content ID is thus not properly analyzing fair use

a formal takedown request under § 512(c)(3), it should nonetheless trigger liability and exempt YouTube from safe harbor status because it effectively stifles speech in the same way that a formal takedown request does.¹⁵⁸

This Part suggests two recommendations that would help restore a balance between service providers, copyright holders, and content creators.¹⁵⁹ Section A argues that computer algorithm systems, including Content ID, cannot sufficiently consider fair use to escape liability for misrepresentation under § 512(f).¹⁶⁰ Section B recommends what a proper fair use consideration should entail to escape misrepresentation liability.¹⁶¹ Section C argues that internal computer algorithm systems should be required to consider fair use, in the same manner that third-party computer algorithm systems are required to do, in order to receive safe harbor status under the DMCA.¹⁶²

A. Computer Algorithm Systems Cannot Sufficiently Consider Fair Use to Escape Liability for Misrepresentation Under § 512(f)

Surprisingly, before the U.S. Court of Appeals for the Ninth Circuit, in *Lenz v. Universal Music Corp.*, in 2015, amended its opinion, in dicta, it commented on computer algorithm systems, a factual issue not present in the case, and suggested that they could sufficiently consider fair use.¹⁶³ Although the court ultimately suggested that copyright holders could employ individuals to review the “minimal remaining content” a computer program does not catch, it is unclear what a sufficient fair use consideration under the takedown procedures entails.¹⁶⁴ The court explained that computer programs automatically issue takedown notices after reviewing content where: “(1) the video track matches the video

because it is simply flagging similar videos or videos that contain snippets of another, without considering the content and purpose of the work. *See* 17 U.S.C. § 107 (enumerating the four fair use factors); *How Content ID Works*, *supra* note 2 (explaining how Content ID makes a match according to keywords and phrases).

¹⁵⁸ *See* 17 U.S.C. § 512(f) (stating that “any person who knowingly materially misrepresents . . . that material or activity is infringing . . . shall be liable for any damages . . .”). *Compare* *How Content ID Works*, *supra* note 2 (explaining how Content ID can have a video blocked or removed even before the copyright holder decides to issue a formal takedown request), *with* 17 U.S.C. § 512(c)(3) (outlining the elements of a formal takedown request that includes “a statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law”).

¹⁵⁹ *See infra* notes 184–198 and accompanying text.

¹⁶⁰ *See infra* notes 163–175 and accompanying text.

¹⁶¹ *See infra* notes 176–183 and accompanying text.

¹⁶² *See infra* notes 184–198 and accompanying text.

¹⁶³ *See* *Lenz v. Universal Music Corp.* (*Lenz II*), 801 F.3d 1126, 1135 (9th Cir.), *amended by* 815 F.3d 1145 (9th Cir. 2015) (stating that the use of computer algorithm systems is a proper balance between policing information and complying with the requirements under the DMCA to consider fair use).

¹⁶⁴ *See id.* (stating three factors that computer programs could identify for automatic takedown requests).

track of a copyrighted work submitted by a content owner; (2) the audio track matches the audio track of that same copyrighted work; and (3) nearly the entirety . . . is comprised of a single copyrighted work” could meet the fair use analysis requirement under § 512(c)(3)(A)(v).¹⁶⁵ The court also noted that an individual could then review the “minimal remaining content that the computer program does not cover.”¹⁶⁶ The court, however, also cited the four factors that a fair use analysis must consider under § 107, but notably, those four factors do not match the three previously suggested by the court.¹⁶⁷ Thus, it is unclear if the court was referring to its own three factors as a sufficient fair use analysis under § 107 (which would violate § 107), or if it was referring to the fair use analysis under § 107 as the “minimal remaining content a computer program does not cover.”¹⁶⁸ In either case, the court seems to have over-simplified the requirements of a proper fair use consideration.¹⁶⁹

In the pre-amended *Lenz* opinion, in his partial dissent, Judge Smith also questioned the majority’s suggestion that computer algorithm systems can properly consider a fair use analysis.¹⁷⁰ He cautioned that although those programs may be useful in detecting infringing content, an individual relying solely on that program can do so only to the extent that the program considers the four factors enumerated in § 107.¹⁷¹ Similarly, other scholars have questioned whether computer algorithm systems can properly conduct a fair use analysis.¹⁷²

Companies that rely solely on computer algorithm systems that automatically issue takedown requests can find themselves violating the takedown notice requirements for failure to properly consider fair use.¹⁷³ A takedown notice must contain “[a] statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by . . . the law[.]”

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* at 1136.

¹⁶⁷ *See id.* at 1132, 1135 (citing 17 U.S.C. § 107 and describing three factors that computer algorithm systems should identify prior to issuing a takedown notice, including video and audio matching as well as substantial copying of an entire work).

¹⁶⁸ *See id.* at 1135–36.

¹⁶⁹ *See id.* at 1135; *see also* 17 U.S.C. § 107 (enumerating the four factors that must be considered in a fair use analysis); Boroughf, *supra* note 1, at 95 (discussing the problems associated with automated computer systems like Content ID, such as the lack of human involvement); Pamela Samuelson, *Unbundling Fair Use*, 77 *FORDHAM L. REV.* 2537, 2540 (2009) (noting that fair use is a fact-intensive inquiry done on a case-by-case basis).

¹⁷⁰ *See Lenz II*, 801 F.3d at 1141 n.3 (stating that the record does not disclose whether computer algorithm systems can currently analyze fair use).

¹⁷¹ *See id.*; *see also* 17 U.S.C. § 107 (enumerating the four factors that must be considered in a fair use analysis).

¹⁷² *See, e.g.*, Boroughf, *supra* note 1, at 95 (discussing the problems associated with automated computer systems like Content ID, such as the lack of human involvement); Samuelson, *supra* note 169, at 2540 (noting that fair use is a fact-intensive inquiry done on a case-by-case basis).

¹⁷³ *See Lenz III*, 815 F.3d at 1151 (holding that copyright holders must consider fair use before issuing a takedown request).

thus as fair use is authorized by law, a complaining party must consider fair use.¹⁷⁴ Thus, parties that rely exclusively on computer algorithm systems incapable of considering fair use are violating § 512(c)(3)(A)(v) and can therefore be held liable under § 512(f) for misrepresentation.¹⁷⁵

B. What a Fair Use Consideration Should Entail to Escape Misrepresentation Liability

In both the pre-amended opinion and the amended opinion, the *Lenz* court failed to explain what encompasses a proper fair use analysis.¹⁷⁶ Although the doctrine of fair use is a flexible and factually intensive analysis, there are well-established factors and certain guiding principles that courts should adhere to when determining whether a computer algorithm system properly considered fair use to escape misrepresentation liability.¹⁷⁷

Section 107 of the Copyright Act of 1976 enumerates four factors that must be considered in a fair use analysis.¹⁷⁸ Because courts rely on these factors when deciding whether a material is fair use, computer algorithm systems should also consider the four factors prior to issuing a takedown notice.¹⁷⁹ Requiring all entities to adhere to the four factors of a fair use analysis allows for consistency across various sectors and potentially cuts down on judicial administrative costs as it could save courts valuable time when conducting a fair use analysis.¹⁸⁰ Thus, although computer algorithm systems could begin identifying potentially infringing works using a red flag method like the one suggested in *Lenz*, an

¹⁷⁴ 17 U.S.C. § 512(c)(3)(A)(v); *Lenz III*, 815 F.3d at 1151.

¹⁷⁵ See 17 U.S.C. § 512(c)(3)(A) (outlining the requirements for a takedown notice); *id.* § 512(f) (stating that any individual can be held liable for misrepresenting that a material or activity is infringing); *Lenz III*, 815 F.3d at 1151 (holding that a party must consider fair use prior to issuing a takedown request).

¹⁷⁶ *Lenz III*, 815 F.3d at 1151–54 (noting that fair use must be considered but failing to explain what that consideration entails); *Lenz II*, 801 F.3d at 1135–36 (holding that fair use must be considered but failing to address how to conduct that analysis).

¹⁷⁷ See 17 U.S.C. § 107 (enumerating the four factors that must be considered in fair use); Samuelson, *supra* note 169, at 2542 (explaining that a fair use analysis goes beyond the four statutory factors as courts rely heavily on the policies underlying fair use, including “promoting freedom of speech and of expression, the ongoing progress of authorship, learning, access to information, truth telling or truth seeking, competition, technological innovation, and privacy and autonomy interests of users”).

¹⁷⁸ See 17 U.S.C. § 107 (enumerating the four factors that must be considered in fair use).

¹⁷⁹ See *Lenz III*, 815 F.3d at 1152; see also Samuelson, *supra* note 169, at 2542 (suggesting that a proper fair use analysis, in addition to the four statutory factors, also reviews policy-relevant issues). Content ID, however, does not consider the four statutory factors, nor does it consider policy-relevant issues. See *How Content ID Works*, *supra* note 2.

¹⁸⁰ See 17 U.S.C. § 107; Samuelson, *supra* note 169, at 2543 (recognizing that a clear and consistent fair use analysis provides courts with a more effective tool). Moreover, Content ID currently exists outside of federal law and requiring it to properly conduct a fair use analysis would bring uniformity. See *How Content ID Works*, *supra* note 2.

analysis applying the four fair use factors should be required prior to sending a takedown notice.¹⁸¹

In addition, courts place emphasis on policy arguments when determining whether a work is fair use, and thus agents of computer algorithm systems should consider strong policy arguments that favor a fair use finding before engaging in the takedown procedures.¹⁸² Due to the factually intensive nature of the fair use analysis and courts' heavy reliance on policy, computer algorithm systems could use red flag provisions to detect possibly infringing work, but will need to rely on human oversight to properly consider fair use to escape misrepresentation liability.¹⁸³

C. Restoring the Balance Among YouTube, Copyright Holders, and Content Creators: Adding Fair Use to Safe Harbor Requirements

Despite the fact that YouTube issues Content ID matches that result in lawful videos being removed or blocked, it escapes liability under the DMCA.¹⁸⁴ Generally, YouTube maintains its safe harbor as long as it does not have actual knowledge that material on its site is infringing, does not receive financial benefit directly attributable to the infringing activity where it has control over the material, and removes the material quickly after being informed of its existence.¹⁸⁵ In addition, YouTube must have a designated agent to receive notifications of alleged infringement.¹⁸⁶ Other third-party automated systems, however, are not so lucky and do face liability for failure to comply with the DMCA; no-

¹⁸¹ See 17 U.S.C. § 107 (enumerating the four fair use factors); *Lenz II*, 801 F.3d at 1135 (describing a red flag-like provision where computer algorithm systems could police for three situations: where “(1) the video track matches the video track of a copyrighted work submitted by a content owner; (2) the audio track matches the audio track of that same copyrighted work; and (3) nearly the entirety . . . is comprised of a single copyrighted work”).

¹⁸² See *Ty, Inc. v. Publ'ns Int'l*, 292 F.3d 512, 519–20 (7th Cir. 2002) (holding that a Beanie Babies collector's guide that commented on the plush toys was fair use because granting author's exclusive rights over critical commentary would hinder the dissemination of public knowledge); *Castle Rock Entm't, Inc. v. Carol Publ'g Grp., Inc.*, 150 F.3d 132, 141 (2d Cir. 1998) (holding that a fair use analysis that rigidly applies the four statutory factors would be at odds with the goals of the Copyright Act); *Warner Bros. Entm't Inc. v. RDR Books*, 575 F. Supp. 2d 513, 540 (S.D.N.Y. 2008) (holding that a fair use analysis determines whether science and the arts are better promoted by allowing or preventing the use); Samuelson, *supra* note 169, at 2542 (explaining that a fair use analysis goes beyond the four statutory factors as courts rely heavily on the policies underlying fair use).

¹⁸³ See 17 U.S.C. § 107 (enumerating the four factors to a fair use analysis, which rely on doing a factually intensive analysis); Samuelson, *supra* note 169, at 2542 (emphasizing the fact intensive nature of a fair use analysis).

¹⁸⁴ See 17 U.S.C. § 512(c) (outlining the requirements by which YouTube must abide in order to maintain its safe harbor status).

¹⁸⁵ See *id.* (explaining how an ISP escapes liability).

¹⁸⁶ See § 512(c)(2) (outlining the requirements of a designated agent).

tably if they fail to consider fair use before sending a takedown notice.¹⁸⁷ Thus, this begs the question: why would copyright holders and websites like YouTube not collaborate to utilize YouTube's own internal automated system to police infringing content?¹⁸⁸

In the context of YouTube, that concern is even greater because YouTube exerts near-monopoly power over the video uploading market.¹⁸⁹ The rise of Content ID demonstrates a new shift in the Internet community where copyright holders and platforms like YouTube are encouraged to work with each other.¹⁹⁰ Although this collaboration has helped music sales and video sales grow, it has come at the expense of content creators.¹⁹¹ Congress, therefore, should restore the balance between copyright holders, ISPs, and content creators by requiring websites that utilize an internal policing system to consider fair use before issuing the equivalent of a takedown notice—in YouTube's case a Content ID match.¹⁹²

In the current regime, content creators that upload videos to YouTube waive the majority of their rights as YouTube has the final say on what material is ultimately displayed on its website.¹⁹³ Although YouTube presents content creators with an opportunity to appeal a Content ID match, that opportunity is not viable for many content creators because the process is lengthy and many videos are

¹⁸⁷ See *id.* § 512(f) (designating liability for misrepresenting an infringement claim); *Lenz III*, 815 F.3d at 1151 (holding Universal's automated system liable for misrepresentation if they fail to consider fair use before sending a takedown request).

¹⁸⁸ See *How Content ID Works*, *supra* note 2 (explaining how Content ID works and how copyright holders are now joining YouTube's index system). Copyright holders are incentivized to use Content ID's system because it requires less policing on their part and allows them to block, remove, or monetize a video without having to file a formal takedown notice and risk the filing of a counter notice or misrepresentation lawsuit. See *id.*

¹⁸⁹ See Boroughf, *supra* note 1, at 101 (discussing YouTube's prominent role in society as a place of empowerment, creativity, publication and everyday conversation).

¹⁹⁰ See *How Content ID Works*, *supra* note 2 (explaining how Content ID works and how copyright holders are now joining YouTube's index system). In the past, however, copyright holders were zealously advocating to shut down websites like YouTube for alleged copyright infringement. See *Viacom Int'l Inc. v. YouTube, Inc. (Viacom I)*, 718 F. Supp. 2d 514, 516 (S.D.N.Y. 2010) (bringing suit against YouTube alleging that it hosted infringing content).

¹⁹¹ See Boroughf, *supra* note 1, at 97 (discussing how Content ID's structure has a potential to chill speech and take advantage of the creativity and work of content creators); Leister, *supra* note 6, at 109 (noting that modern copyright law is in danger because of YouTube's monopoly over video sharing platforms and their ability to escape liability, the lack of congressional regulation, a content creator's fear of suit, and copyright holders' power of the purse).

¹⁹² See 17 U.S.C. § 512(c) (outlining the requirements that YouTube must abide by in order to keep its safe harbor status); *Lenz II*, 801 F.3d at 1135 (holding that a party must consider fair use prior to issuing a takedown request); Leister, *supra* note 6, at 109 (noting the lack of legislative regulation).

¹⁹³ See *Terms of Service*, YOUTUBE, <https://www.youtube.com/t/terms> [<https://perma.cc/7WVP-6EWX>] (explaining in its account termination policy that YouTube has final say on what content goes up on its website).

time-sensitive.¹⁹⁴ Thus, Congress should amend the DMCA to add a fair use requirement for ISPs like YouTube to continue receiving its safe harbor status.¹⁹⁵

The provision could, for example, require that ISPs conducting their own internal policing consider fair use before removing or blocking a video.¹⁹⁶ The proposed requirement would thus help restore the balance between copyright holders, ISPs, and content creators, as content creators would gain more protection over their videos.¹⁹⁷ The requirement is reasonably tailored to avoid placing additional burdens on ISPs because it does not require ISPs to conduct their own internal policing; rather it mandates that they comply with the consideration of fair use if they do.¹⁹⁸

CONCLUSION

As computer automated systems searching for copyright infringement on the Internet become more popular, a greater risk to the Internet community is posed as more material is incorrectly flagged and then removed or blocked. Those abused by overzealous takedowns have little to no redress when these actions are initiated by private websites monitoring their own systems. The DMCA sought to address concerns about chilling speech, promoting creativity, and encouraging fair use by balancing the bundle of rights held by copyright holders, ISPs, and content creators. Copyright holders were granted the swift removal of alleged infringing content through the takedown procedures, ISPs like YouTube were granted safe harbor as long as they complied with those minimal procedures, and content creators were granted the right to combat abuse through the misrepresentation provision of the DMCA. With websites policing their own systems, however, the balance of rights is distorted. Copyright holders still benefit from swift removal, websites like YouTube still benefit from safe harbors, yet content creators and society lose from the lack of creative and fair

¹⁹⁴ See *How Content ID Works*, *supra* note 2 (explaining the appeal process for a Content ID match); Declan McCullagh, *McCain Campaign Protests YouTube's DMCA Policy*, CNET (Oct. 27, 2008, 11:39 AM), <http://www.cnet.com/news/mccain-campaign-protests-youtubes-dmca-policy/> [<https://perma.cc/YZJ9-RXVA>] (noting political parties' complaints of YouTube's rapid removal of videos).

¹⁹⁵ See 17 U.S.C. § 512(c) (outlining the requirements that YouTube must abide by in order to keep its safe harbor status); *Lenz III*, 815 F.3d at 1151 (holding a party must consider fair use prior to issuing a takedown request); Leister, *supra* note 6, at 109 (noting the need for more legislative regulation).

¹⁹⁶ See 17 U.S.C. § 512(c) (outlining the requirements that YouTube must abide by in order to keep its safe harbor status); *Lenz III*, 815 F.3d at 1151 (holding that a party must consider fair use prior to issuing a takedown request); See Leister, *supra* note 6, at 109 (stating the need for more regulation).

¹⁹⁷ See Eakman, *supra* note 22, at 635 (noting that the DMCA attempted to strike a balance between the rights of copyright holders and the rights of those that upload to the Internet).

¹⁹⁸ See *Lenz III*, 815 F.3d at 1157–58 (explaining that requiring a fair use analysis is necessary to secure the free exchange of ideas on the Internet).

use material. To decrease the volume of lawful videos that are removed or blocked, computer algorithm systems should be required to consider fair use by invoking human review back into the system. Additionally, ISPs that conduct internal policing systems should also be required to consider fair use to maintain their safe harbor status.

LAURA ZAPATA-KIM